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Bakalářská práce

# VYBRANÉ FONOLOGICKÉ JEVY ZPŮSOBUJÍCÍ OBTÍŽNOSTI PŘI POROZUMĚNÍ ANGLICKÉHO MLUVENÉHO PROJEVU 

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## Undergraduate Thesis

# SELECTED PHONOLOGICAL PHENOMENA <br> CAUSING DIFFICULTIES IN UNDERSTANDING ENGLISH SPOKEN DISCOURSE 

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Prohlašuji, že jsem práci vypracoval samostatně s použitím uvedené literatury a zdrojů informací.

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Language is more than just words put one after another. Apart from the grammatical structures which define the rules of, for example, word order without which a line of words would make no sense, the statement is valid for the spoken language looked at from the phonological point of view, too. If separate words are audio-recorded and then combined to form sentences, as for instance for the purposes of railway station announcements, the resulting speech sounds very unnatural. "Many years ago scientists tried to develop machines that produced speech from a vocabulary of pre-recorded words ...the quality of the speech was so unnatural that it was practically unintelligible" (Roach, 1991, p. 120). It is due to what linguists call The Aspects of Connected Speech. Thanks to these, there is a clear "difference between the way humans speak and what would be found in 'mechanical speech' " (Roach, 1991, p. 120). The list of aspects of connected speech includes assimilation, elision and linking. But do these phenomena really make spoken language more easily intelligible or are the aspects of connected speech exactly those that make spoken English discourse more difficult to understand?

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## 1. INTRODUCTION

### 1.1. THE GOAL OF THE THESIS

The goal of this thesis is to take a look at selected phonological phenomena that are observable in the speech of the native speakers of the English language and show that these cause difficulties in understanding spoken English discourse to both the non-native learners and users of the English language as well as to other native speakers. Apart from such phenomena as elision, assimilation or linking, the work deals with selected phonetic differences among the English language varieties which not seldom cause confusion, too. Of course, to do so, first, it must be proved that such difficulties in understanding spoken English discourse actually do exist and search for the reasons of their existence. So... how difficult is spoken English discourse to understand?

## 2. SUMMARY IN CZECH

Ačkoliv je Anglický jazyk jeden z nejrozšířenějších na světě, radou lidí je označován jako těžko srozumitelný. V tomto smyslu hovoř̌í dokonce i mnozí z těch, kteří jej sami poměrně slušně zvládají, při čemž často poukazují na fakt, že při komunikaci s rodilým mluvčím nejsou mnohdy schopni porozumět ani výrazům, které jinak patří do jejich aktivní slovní zásoby. Cúlem této práce je zaměřit se na vybrané fonologické jevy, které lze pozorovat zpravidla výlučně v projevu rodilých mluvčí a kterými jsou obtíže při porozumění mluveného Anglického jazyka způsobovány.

## 3. THE EXISTENCE OF INTELLIGIBILITY PROBLEMS

### 3.1. NON-NATIVE SPEAKERS' \& GENERAL OPINIONS

It does not require a scientific approach to prove that it is not only the non-native speakers of the English language but surprisingly often the native speakers, too, who struggle to understand what has been said. Independently of each other, large numbers of the non-native speakers of the English language prove this point by reporting that after turning on English subtitles while watching a British or American movie, they find out that what until then was an unintelligible crosstalk suddenly becomes a perfectly understandable conversation. While saying that, they tend to emphasize how surprising it is to find out that little or no unknown vocabulary has been used, yet without the transcript the discourse is too difficult for them to understand. "I can read the language quite well but when I hear people speaking it I can't understand anything." (ric d, 2008, http://answers.yahoo.com/question/index?qid=20080819093647AANq3vf). Many native speakers of the English language also admit to having problems in understanding their own mother tongue and usually ascribe them to the regional and/or social dialects of the English language. Typically, it is the Americans who claim to have trouble understanding the British accents but the Brits themselves, too, confess to having to try hard to understand their fellow Englishmen who may come from only (tens of) miles away. Was it not George Bernard Shaw who said: "England and America are two countries separated by a common language,"?
(http://www.quotationspage.com/subjects/England/) while Oscar Wilde insisted that, "We have really everything in common with America nowadays except, of course, language"? (Wilde, 1998, p. 52).

### 3.2. WHAT EXPERTS SAY

To get some clear evidence that difficulties in understanding spoken English discourse actually do exist and to find some concrete examples, Fatal Words (1994), a book by Steven Cushing may be used. In the first chapter he "discusses problems that arise from characteristics of language itself: ambiguity, in which a word or phrase has more than one meaning; homophony, in which different words sound exactly or almost alike; peculiarities of punctuation or intonation, which can wreak havoc in even the simplest situations; and the complexity of speech acts, which correspond only in the most indirect ways to sentence or statement types" (p. x). Further on, in a chapter on homophony, the author describes an event during which the instruction "Last of the power" ( p .12 ) was issued to a pilot but what the pilot later reported to understand was "Blast of power" (p. 12). From a linguistic point of view, it is unnecessary to search for the consequences of
this particular misunderstanding but it does work as a suitable example for this thesis. Cushing's book is not primarily intended for linguists but it provides them and all who may be interested in the topic with examples of "how miscommunication has led to dozens of aircraft disasters" (Cushing, 1994, Editorial review).

### 3.3. WHAT NATIVE SPEAKERS SAY

It comes as no surprise that the Internet, too, is a bottomless source of examples of language misunderstandings. To stick to those connected with aviation, one may click to http://www.pprune.org/questions/150526-disasters-due-atc-misunderstandings.html where pilots post their thoughts on the topic. Here are some of their quotes: "One that gets some U.S. crews is 'taxi to holding position runway 05 '. If you haven't flown overseas it sounds a lot like 'taxi to hold in position runway 05‘." (Airbubba, Disasters due to ATC Misunderstandings, 2nd November 2004). Or: "Think of two nationalities. Hear the words a) Set 29 92; b) Set to 992. Pilot a) sets 29.92" Hg direct; pilot b) looks at a card reads $992 \mathrm{mb}=29.29$ " Hg. Roughly 600 ft difference?" (enicalyth, Disasters due to ATC Misunderstandings, 6th November 2004).

Not only serious, life-threatening evidence can prove the existence of difficulties in understanding spoken English discourse. One thing that comes to mind when listening the fast talking and difficult-to-understand Little Britain character of Vicky Pollard is that her creators' goal was to ridicule the unintelligibility of her discourse. Let there be said that the character and the way she speaks must be based on the hard-to-understand speaking of a big part of the under twenty population of the United Kingdom - an opinion broadly suggested by many and in this work represented by a quote taken from http://www.urbandictionary.com/define.php?term=vicky+pollard : "...incoherent string of words uttered by Vicky Pollard of Little Britain - and those in England who are like her (of which there are far too many.)" (Sam, Yeah but, no but..., $3^{\text {rd }}$ Jan 2005).

### 3.4. JENKINS

Obviously, some may say that proving the existence of difficulties in understanding spoken English discourse on pilot/tower communication is misleading because objective circumstances of radio connection obstruct the communication. Nor a comedy program may be perceived respectable enough for the purpose. However, the given examples stand on phonological phenomena rather than on poor radio connection, and what better criteria is there to decide whether a discussed matter has become a problem (difficulty) or not than if it has eventually become a subject of satire rather than merely a subject of interest and research of a few scientists? Non-the-less, since this text is a thesis, the above-given arguments should be supported by a linguistics expert's opinion. In 2000 Jennifer

Jenkins published The Phonology of English as an International Language in which she takes a detailed look at the intelligibility of spoken English discourse. The author studies communication and misunderstandings between the native and the non-native speakers of the English language as well as those that occur between two non-native speakers. Among other topics, she focuses on the effects that selected phonological phenomena (e.g.: the aspects of connected speech) and the pronunciation differences between different varieties of the English language have on the intelligibility of spoken English discourse (see page 74). Jenkins will be cited later on in this work.

### 3.5. CONCLUSION

As shown above, difficulties in understanding spoken English discourse do exist. Apart from those caused by other factors, among which the lexical factor may be mentioned, there are undoubtedly those caused by various phonological phenomena. But why do phonological phenomena cause the difficulties?

### 3.6. ON THE REASONS

Above all, many of the non-native speakers' mother tongues are based on completely different alphabets than the English language and when the speakers of these languages produce phonemes to represent the letters of their words, they are producing completely different sounds than the English language native speakers because they are moving their articulators (the sound creating organs of the human body) into different positions than the English language native speakers. This statement is valid even when speaking about those non-native speakers of the English language whose mother tongues are based on the same alphabet as English. In fact, such non-native speakers produce different sounds even when they are producing phonemes that are represented by the same letter in both languages. For example, English 'w' is represented by a different sound than Czech 'w', which, in fact, sounds the same as 'v'. Consequently, these sounds interact differently, which is what causes the differences in rules of various phonological phenomena (e.g. assimilation) of English and the other languages. This fact is referred to as 'phonetic and phonological transfer (see Odlin, 1989, p. 113), Jenkins, on the other hand, speaks about 'inter-speaker variation' (Jenkins, 2000, p. 33).

Apart from that, the English language is specific in several ways which is another reason that enables some phonological phenomena (e.g. assimilation or linking), which are otherwise present in other languages, too, to affect the intelligibility of spoken English discourse more than they affect the intelligibility of spoken discourse of some other languages. For example, English is one of very few languages in the world that reduce in quality. This means that the unstressed
syllables, or more precisely the vowels of the unstressed syllables, are clearly pronounced more shortly than the stressed ones. If a native speaker speaks quickly enough, to a non-native speaker it may seem that the unstressed syllables are not pronounced at all. This effect certainly causes many difficulties in understanding spoken English discourse, especially if the unstressed syllables do not contain a consonant. In addition to that, the English language belongs to what are called the stresstimed languages which all reduce in time. Among them are also German, Russian, Arabic or Italian. On the other hand, with the syllable-timed languages (e.g. the Czech language, Spanish or French), each syllable, stressed or unstressed, is given (almost) the same time and the quality is not reduced.

And finally, there is the enormous number of users by whom the English language is spoken all over the world. In each part of the planet, the English language sounds different and the same can be said about each region of every English speaking country. As if this were not complicated enough, there are idiolects. An idiolect is a variety of a language unique to an individual. It is manifested by patterns of vocabulary selection, grammar, or pronunciation that are unique to the individual. Knowing this, it is only logical that the more people speak a language, the more varieties of it are in use. Along with Chinese, the English language is the most widespread and widely used language in the world. Because of the British colonial policy of just a few centuries ago, the English language has become the worldwide number one language in business, politics, sports or showbusiness which means that not only its native speakers but the non-native speakers, too, use it on a large scale. That makes it impossible for the non-native speakers to go unaffected by such use of the language and as the idiolects mix with one another, even more and more new varieties of the English language are continually being created.

For all these reasons it can be said that it is no surprise that the non-native speakers of the English language are sometimes difficult to understand and that, as this work aspires to prove, the same can be said about the native speakers of the English language.

Let us take a look at a group selected of phonological phenomena and see how they make the English language more difficult to understand. It should be noted that unless otherwise stated when referring to the non-native speakers, references are to the Czech non-native speakers of the English language.

## 4. THEORETICAL PART

### 4.1 THE ASPECTS OF CONNECTED SPEECH

Language is more than just words put one after another. Apart from the grammatical structures which define the rules of, for example, word order without which a line of words would make no sense, the statement is valid for the spoken language looked at from the phonological point of view, too. If separate words are audio-recorded and then combined to form sentences, as for instance for the purposes of railway station announcements, the resulting speech sounds very unnatural. "Many years ago scientists tried to develop machines that produced speech from a vocabulary of pre-recorded words ...the quality of the speech was so unnatural that it was practically unintelligible" (Roach, 1991, p. 120). It is due to what linguists call The Aspects of Connected Speech. Thanks to these, there is a clear "difference between the way humans speak and what would be found in 'mechanical speech'" (Roach, 1991, p. 120). The list of aspects of connected speech includes assimilation, elision and linking. But do these phenomena really make spoken language more easily intelligible or are the aspects of connected speech exactly those that make spoken English discourse more difficult to understand? It may seem that there is no simple answer to this question because even the well-respected experts in the field of linguistics seem to disagree with one another and one may even come to the conclusion that in some cases they contradict themselves. Some of them, including Peter Roach, say that the aspects of connected speech make spoken English discourse easier to understand while others, like e.g. Jennifer Jenkins, speak in favor of the opposite idea as they claim that spoken English discourse loses its intelligibility when the aspects of connected speech are present in the discourse. The contradictory opinions are most likely caused by the different points of view of the two groups of the language scientists. The traditional, conservative attitude towards the intelligibility of spoken English discourse deals with the way that the non-native speakers of the English language produce sounds when they are speaking English. This approach prescribes how the non-native speakers should speak, how they should use their articulators in order to be easily understood by the native speakers of the English language. Thanks to this attitude, represented by, for instance, Peter Roach, the English language learners are provided with invaluable advice on how to master their pronunciation in order to sound native-like, but unlike the opposite point of view, it seems to disregard the fact that the way in which the native speakers of the English language speak may, too, be found unintelligible or difficult to understand by the non-native speakers of the English language. So once again, do the aspects of connected speech make spoken English discourse more easily intelligible or are they to be blamed for making it more difficult to understand?

### 4.1.1. ASSIMILATION

Roach (1991) claims that "Assuming that we know how the phonemes of a particular word would be realised when the word was pronounced in isolation, when we find a phoneme realised differently as a result of being near some other phoneme belonging to a neighbouring word we call this an instance of assimilation. Assimilation is something that varies in extent according to speaking rate and style; it is more likely to be found in rapid, casual speech and less likely in slow, careful speech" ( p .124 ). In other words, the one and the same letter of the one and the same word is pronounced as a different phoneme in different contexts. Logically, this must be more confusing than if the letter (and any letter) was represented by the same phoneme in all situations. In addition, the faster and the less careful the speech is, the more assimilation alters the words' pronunciation from what they sound like when they are pronounced slowly and carefully, or separately from one another. Of course, there are rules that clearly define how assimilation works and a number of selected rules are listed below. For any two native speakers of the English language the correct use of assimilation is natural and the theoretical knowledge of its rules is unnecessary. Therefore, as Roach suggests, the correct use of assimilation can make spoken English discourse easier to understand. This, however, can be agreed with only to a certain extent. Assimilation might make spoken English discourse easier to understand when it is compared to the mechanical speech described above but as Jenkins (2000) says: "Assimilatory processes are used by fluent speakers to facilitate pronounceability by making articulation easier." (p. 72). She adds that assimilatory processes "contrast with dissimilatory processes, where speakers subordinate their speech strategies to their listeners' needs by articulating more clearly" (p. 72). Furthermore, she directly contradicts Roach while claiming that "dissimilatory processes rarely cause intelligibility problems" (p. 148). In other words, assimilation (and the other aspects of connected speech) make spoken English discourse easier to produce but not easier to perceive. The practical part of this thesis shows that the non-native speakers of the English language and sometimes the native speakers, too, may struggle to understand spoken English discourse when it contains the elements of assimilation. Obviously, the misunderstandings caused by this phenomenon and by the other aspects of connected speech most usually occur when a native speaker of the English language leads a conversation with a nonnative speaker, non-the-less they appear in all native-speaker communication, too. It should be mentioned that these misunderstandings happen both ways - both the native and the non-native speakers of the English language may find it hard to understand. But why? Three main reasons are to be blamed. Number one - as described above and demonstrated in the practical part of this work, assimilation (and the other aspects of connected speech) alter the pronunciation of words. Number two - typical non-native speakers of the English language are unaware of the rules of assimilation
(and the other aspects of connected speech) of the English language because this highly specific phenomenon is usually only a peripheral focus of most upper-intermediate or lower level textbooks which at best is the level that most learners of the English language reach. And number three although assimilation is a linguistic phenomenon that is present in other languages, too, the rules of assimilation differ from language to language and so the native speakers of different languages perceive something else as natural. As shown in the practical part, being unfamiliar with the rules of assimilation of the English language and the differences between assimilation in English and one's mother tongue is undoubtedly a source of misunderstandings. What types of assimilation are there in the English language? What rules do these types follow?

### 4.1.1.1. REGRESSIVE V. PROGRESSIVE

This is the basic division of assimilation. It tells whether the consonant that comes first changes the consonant that comes after it to become like the first one in some way, or whether it is the other way around. The assimilation is called regressive when "the phoneme that comes first is affected by the one that comes after it" (Roach, 1991, p. 124). Logically, if the process goes in the opposite direction, we speak about progressive assimilation.

### 4.1.1.2. WITHIN A WORD V. ACROSS WORD BOUNDARIES

Assimilation is observable either within a word, then we speak about assimilation across morpheme boundaries, or across word boundaries, when typically the last consonant of the first word affects, or is affected by, the initial consonant of the following word.

### 4.1.1.3. ASSIMILATION OF PLACE OF ARTICULATION

Roach (1991) states that assimilation of place is most obvious where a final consonant of a word "with alveolar place of articulation is followed by an initial consonant with a place of articulation that is not alveolar. For example, the final consonant in 'that' $\boldsymbol{\delta} \boldsymbol{æ t}$ is alveolar $\mathbf{t}$. In rapid, casual speech the $\mathbf{t}$ will become $\mathbf{p}$ before a bilabial consonant as in: 'that person' $\boldsymbol{\varnothing} \boldsymbol{æ p} \mathbf{p 3 : s n}$. Before a dental consonant, $\mathbf{t}$ will change into a dental plosive, for which the symbol is $\mathbf{t}$, as in: 'that thing' $\boldsymbol{\delta} \boldsymbol{æ} \mathbf{\theta} \mathbf{\theta i} \mathbf{\eta}$. Before a velar consonant, the $\mathbf{t}$ will become $\mathbf{k}$ as in: 'that case' $\boldsymbol{\delta} \boldsymbol{æ k} \mathbf{k e i s . ~ I n ~ s i m i l a r ~}$ contexts $\mathbf{d}$ would become $\mathbf{b}, \underline{\mathbf{d}}$ and $\mathbf{g}$, respectively, and $\mathbf{n}$ would become $\mathbf{m}, \underline{\mathbf{n}}$ and $\boldsymbol{\eta}$. However, the same is not true for the other alveolar consonants: $\mathbf{s}$ and $\mathbf{z}$ behave differently, the only noticeable change being that $\mathbf{s}$ becomes $\boldsymbol{\int}$, and $\mathbf{z}$ becomes $\mathbf{3}$ when followed by $\boldsymbol{\int}$ or $\mathbf{j} \mathbf{"}(\mathrm{p} .124,125)$.

### 4.1.1.4. ASSIMILATION OF VOICING

Both regressive and progressive assimilation of voicing as well as within-a-word and across-word-boundaries examples of assimilation of voicing are to be found in the English language. As Roach (1991) explains, "Only regressive assimilation of voice is found across word boundaries. If the final consonant of the first word is a lenis (i.e. "voiced") consonant and the initial consonant of the following word is fortis (i.e. "voiceless") we often find that the lenis consonant has no voicing; this is not a very noticeable case of assimilation, since initial and final lenis consonants usually have little or no voicing anyway" (p. 125). When the final consonant of the first word is voiceless and the initial consonant of the following word is voiced, "assimilation of voice never takes place" (Roach, 1991, p. 125).

From the point of view of a non-native speaker of the English language whose mother tongue is Czech, the rules of across-morpheme-boundaries assimilation of voicing are significantly more important. Roach (1991) states that an "example of a type of assimilation that has become fixed is the progressive assimilation of voice with the suffixes $\mathbf{s}$ and $\mathbf{z}$; when a verb carries a third person singular '-s' suffix, or a noun carries an '-s' plural suffix or an '-'s' possessive suffix, that suffix will be pronounced as $\mathbf{s}$ if the preceding consonant is fortis ("voiceless") and as $\mathbf{z}$ if the preceding consonant is lenis" (p. 126). It means that 'dogs' is pronounced as [dpgz], 'Brad's' is pronounced as [brædz] and 'rides' is pronounced as [raidz].

Unfortunately, assimilation of voicing does not work like this in all languages. The rules of assimilation of voicing of, for instance, the Czech language make a Czech language native speaker pronounce the words above as [dpks] (or rather [doks]), [bræts] (or [brets]) and [raits]. Obviously, an English language native speaker who is unfamiliar with the rules of assimilation of voicing of the Czech language does not perceive the words 'dogs', 'Brad's' and 'rides' but instead he/she perceives 'docks', 'brats' or 'Brett's’ and 'rites'. Unless the context helps, the conversation becomes confusing.

If the rules of assimilation of voicing are not followed, the non-native speaker not only leaves "a very strong impression of a foreign accent" (Roach, 1991, p. 125) but he/she makes the discourse more difficult to understand, especially to the native speakers, and possibly creates misunderstandings.

### 4.1.1.5. PLOSIVES, GLOTTAL STOP

Glottal stop is a type of assimilation. In The handbook of English linguistics (2006), Aarts and McMahon claim that "A plosive sound involves a momentary complete obstruction to the airstream, which concludes with an 'explosive' element." (p. 366). When this happens, linguists speak
about 'glottal stop' or 'glottal plosive', for which the symbol $\mathbf{P}$ is used. Roach (1991) explains that the production of such sound has four phases:
i) The first phase is when an articulator or articulators move to form the stricture for the plosive. We call this the closure phase.
ii) The second phase is when the compressed air is stopped from escaping. We call it the hold phase.
iii) The third phase is when the articulators used to form the stricture are moved so as to allow air to escape. This is the release phase.
iv) The fourth phase is what happens immediately after iii), so we will call it the post-release phase.

The English language has six plosive consonants: $\mathrm{p}, \mathrm{t}, \mathrm{k}, \mathrm{b}, \mathrm{d}, \mathrm{g}$. Arguably, the most significant example of glottal stop is "T glottaling". In Estuary English: Levelling at the Interface of RP and South-Eastern British English (2003), Altendorf uses the term "T glottalling" (p. 63) and describes it as a phenomenon which "involves the replacement of the voiceless alveolar plosive /t/ by a voiceless glottal plosive [?] (e.g. in butter, bottle)." (p. 63). She also explains its importance by stating that /t/ "it more often "glottalled" than any other consonant" (p. 64). However, Roach (1991) denotes glottal stop little significance saying that "it is usually just an alternative pronunciation of $\mathbf{p}, \mathbf{t}$ or $\mathbf{k}$ in certain contexts." (p.31). Skandera, Burleigh and their Manual of English Phonetics and Phonology (2005) support Roach's opinion while stating that "the glottal stop is of little importance in the description of RP as it is usually associated with a non-standard London accent." (p. 12). However, Aarts and McMahon (2006) bring evidence of much broader use of glottal stop as they present the results of studies of several other linguists: "A series of studies over the past 15 years has highlighted the intricate sociolinguistic and stylistic factors determining glottalling and preglotalization in several accents of British English: Aberdeenshire (Marshall 2003), Bolton (Shorrocks 1988), Cardiff (Mees 1987, Mees and Collins 1999), Glasgow (Stuart-Smith 1999), Middlesborough (Llamas 2000), RP in general (Fabricius 2002a), Tyneside (Trousdale 2002)" (Aarts and McMahon, 2006, p. 368). Realizing the fact that RP is spoken by only about two to three per cent of the population of the United Kingdom, downplaying the role of glottal stop in the intelligibility of spoken English discourse can be considered a little incorrect. Why? The /t/ phoneme as well as the other plosives is a consonant. As proved in the practical part of this thesis, consonants play a key role in understanding speech. Therefore, changing a consonant into a completely different sound, which by the way the Czech and many other non-native speakers of the

English language cannot even assign to any letter from 'their' alphabet, necessarily has to cause difficulties in understanding spoken English discourse.

### 4.1.1.6. COALESCENT ASSIMILATION

As described in Focus on English: linguistic structure, language variation and discursive use (2008) by Wolf, Peter and Polzenhagen, coalescent assimilation is a type of assimilation in which "a sequence of two sounds coalesces or comes together and merges to give place to a single new sound different from either of the original sounds." (p. 128). This phenomenon of the English language can be observed in the following situations:

$$
\begin{aligned}
& / \mathrm{t} /+\mid \mathrm{j} /=/ \mathrm{t} / \\
& / \mathrm{s} /+/ \mathrm{j} /=/ \mathrm{g} / \\
& / \mathrm{d} /+/ \mathrm{j} /=/ \mathrm{d} 3 / \\
& |\mathrm{z} /+|\mathrm{j} /=| \mathrm{z} /
\end{aligned}
$$

See the practical part of the thesis to find examples of this phenomenon being responsible for spoken English discourse misunderstandings.

### 4.1.2. ELISION

While explaining elision theoretically, Roach (1991) claims that, "the nature of elision may be stated quite simply: under certain circumstances sounds disappear; one might express this in more technical language by saying that in certain circumstances a phoneme may be realised as zero, or have zero realisation or be deleted" (p. 127). In the subsequent part he chooses a small number of the many existing examples some of which are given here:

1. Loss of weak vowel after $\mathbf{p}, \mathbf{t}, \mathbf{k}$ in words like 'potato', 'canary', 'perhaps', 'today', where the vowel in the first syllable may disappear and the aspiration of the initial plosive takes up the whole of the middle portion of the syllable.
2. Weak vowel $+\mathbf{n}, \mathbf{l}$ or $\mathbf{r}$ becomes syllabic consonant. For instance 'tonight' being pronounced as [tnait] or 'correct' being pronounced as [krekt].
3. Avoidance of complex consonant clusters.
4. Loss of final $\mathbf{v}$ in 'of' before consonants.

Roach (1991) expresses his doubts over whether contractions of grammatical words can be counted as examples of elision as they are represented by special spelling forms in written language.

### 4.1.3. LINKING AND INTRUSION, JUNCTURE

In connected speech, English language native speakers link words together, leaving no pause between them. This is done in three ways: by adding $/ \mathrm{j} / \mathrm{/} / \mathrm{w} /$ or (most importantly) $/ \mathrm{r} /$ between words.

### 4.1.3.1. LINKING /j/

In How to Teach Pronunciation (2000) Kelly explains that "when a word ends in /i:/, or a diphthong which finishes in / $\mathrm{I} /$, speakers often introduce a $/ \mathrm{j} /$ to ease the transition to a following vowel sound." (p. 111).

### 4.1.3.2. LINKING/w/

Linking /w/ is added "when a word ends in $/ \mathrm{u}: /$, or a diphthong which finishes with $/ \widetilde{/} /$ " (Kelly, 2000, p. 112).

### 4.1.3.3. LINKING AND INTRUSIVE /r/

While speaking about linking and intrusive /r/, Kelly (2000) first explains the difference between so-called 'rhotic' and 'non-rhotic' varieties of the English language: "Some accents of English are described as rhotic, which means that when the letter $r$ appears in the written word after a vowel (as in car or carve), the /r/ phoneme is used in the pronunciation of the word (as in /ka:r/ or /ka:rv/). Examples are most dialects of American English, Irish English and certain British regional accents." (p. 111). Other varieties are non-rhotic and in these dialects the above mentioned words are pronounced without the /r/ phoneme (/ka:/, /ka:v/). Kelly (2000) further points out that when "there is a written $r$ at the end of a word and it occurs between two vowel sounds, speakers with non-rhotic accents often use the phoneme $/ \mathrm{r} /$ to link the preceding vowel to the following one." (p. 111). As far as intrusive /r/ is concerned, Kelly (2000) states that "where two vowel sounds meet and there is no written letter $r$, speakers with non-rhotic accents will still often introduce the $/ \mathrm{r} /$ phoneme in order to ease the transition. This happens when the first word ends in $/ \mathrm{\rho} /$, $/ \mathrm{a}: / \mathrm{or} / \mathrm{\rho}: /$.

Speakers with rhotic accents tend not to do this." (p. 111).

### 4.1.3.4. JUNCTURE

Juncture is a set of phonological features that signal where one (linked) word finishes and the following one starts. These features should allow a listener to distinguish between 'my train' and 'might rain' in spite of the fact that the same phonemes are used. Kelly (2000) includes "difference in length of vowel sounds, variations in degrees of syllable stress, differently timed articulation of the consonant sounds and allophonic variations" (p. 112) among those features.

### 4.2. STRESS

### 4.2.1. STRESS, WEAK SYLLABLES

Every syllable of every English word can be labeled either as stressed or unstressed. As Roach (1991) states: "From the perceptual point of view, all stressed syllables have one characteristic in common, and that is prominence; stressed syllables are recognized as stressed because they are more prominent than unstressed syllables." (p. 85). There are four factors that define this prominence: length, loudness, pitch and quality. These attributes work together but sometimes only one of them makes a syllable prominent. It should also be mentioned that "Experimental work has shown that these factors are not equally important; the strongest effect is produced by pitch, and length is also a powerful factor" (Roach, 1991, p. 86). Length is selfexplanatory. Pitch can be described as the relative highness of a tone which depends on the number of vibrations per second produced by the vocal cords. We distinguish between high and low pitch. Stressed syllables can be further divided into those that carry the primary stress of a word and those that carry the secondary stress, where the primary stress-carrying syllables are more prominent than the latter. The group of unstressed syllables, too, has its own sub-type: the so-called weak syllables. Weak syllables are those unstressed syllables which contain one of the following phonemes:
i) The vowel ə (schwa)
ii) A close front unrounded vowel (/i:/ or /I/)
iii) A close back rounded vowel (/u:/ or $/ \widetilde{/} /$ )
iv) A syllabic consonant ( $1, \mathrm{n}, \mathrm{m}, \mathrm{h} /$ or r )

Roach (1991) points out that these syllables are shorter, articulated with little energy and "sound less prominent than an unstressed syllable containing some other vowel." (p. 88). In other words,
stress and 'no stress' fundamentally affect the length and the quality of syllables. Since quite a large number of rules concerning stress placement can be listed, with each having numerous exceptions, the linguists disagree over whether these rules are worth learning and even worth defining. Some say that foreign speakers should learn the stress of each word by heart at the time of learning the word itself instead of trying to adopt these rules (Jones, 1975, sections 920-1) while others, including Roach (1991), insist that "one must try to find a way of writing rules that express what native speakers naturally tend to do in placing stress" (p. 92). While deciding which approach to take, the subject should be viewed from two perspectives: the native speakers' perspective and the non-native speakers' perspective. As Roach says, the native speakers of the English language place stress in a natural way even without knowing the rules. As far as the foreign learners are concerned, their theoretical knowledge of the stress placement rules can help them pronounce English words correctly, but so can the other suggested method of learning the stress by heart when first learning the word. More importantly, the theoretical knowledge of these rules can hardly help them understand what is being said because in the fast tempo of casual speech in which the elements of assimilation, elision and linking are aplenty, the stressed syllables come one after another and are hardly ever interrupted by the unintelligible sounds of the weak syllables. That gives the non-native listeners a very little chance to analyze whether the prominent syllable that they are hearing is the first, the middle or the final syllable of a word. In other words, under these circumstances there is no time to try to apply the theoretical knowledge of the rules in order to understand what has been said. Apart from that, in written language the weak syllables can be spelled in many different ways. Schwa itself can be spelled with 'a' (attend), 'ar' (particular), 'ough' (thorough), 'ate' (private) and in several other ways. If schwa was spelled the same in every word, the listeners would be able to complete the word that they partly misheard with that one spelling - in combination with the stressed syllable that they did hear, it would allow them to reconstruct the word that they did not understand. But since there are so many ways in which the weak syllables can be spelled, this cannot be done. Logically, it can be said that stress and the weak syllables make the English language discourse more difficult to understand.

### 4.2.2. WEAK FORMS

This subject is closely related to the previous one, dealing with a group of frequently used English words which can be pronounced in two ways. This group consists of function words, namely definite and indefinite articles, demonstrative pronouns ('that'), personal pronouns (both subjective and objective forms), possessive pronouns ('your'), conjunctions ('and', 'but'), prepositions (e.g. 'for', 'from', 'of', 'to' etc.), auxiliary and modal verbs, existential quantifier
'some' and others. Unlike their strong forms, the weak forms of these function words contain a weak syllable with the schwa sound (or any other weak syllable) or, as in case of e.g. 'him', the initial consonant ' $h$ ' is dropped. Although it is possible to use purely the strong forms in speech, Roach (1991) suggests that apart from sounding foreign while using only the strong forms, "speakers who are not familiar with the use of weak forms are likely to have difficulty understanding speakers who do use weak forms" adding that "practically all native speakers of British English use them" (p. 102).

### 4.3. RHOTIC AND NON-RHOTIC VARIETIES

The description of the differences in pronunciation between the rhotic and the non-rhotic varieties of English was provided earlier in this work, in the chapter on linking. The goal of the practical part of this thesis is to bring examples that prove that the r-dropping typical of the nonrhotic accents of the English language can cause difficulties in understanding spoken English discourse because a big percentage of the $/ \mathrm{r} / \mathrm{phonem}$ es are not pronounced.

### 4.4. NATIONAL STANDARDS, REGIONAL DIALECTS

The English language is spoken in many parts of the world. Even when sticking strictly to the English-speaking countries, those in which English is the mother tongue for the majority of population, the vocabulary, grammar, spelling and pronunciation of the English language differ from one country to another and the linguistics experts speak about so called national standards. Apart from that, differences in the language can be found within one country, too, and in this case, the linguists distinguish between various regional dialects. It is obviously not the goal of this thesis to provide a complete list of the phonetic differences between all existing varieties of the English language but even a little sample of the pronunciation variations within a relatively small country of Great Britain should be demonstrative enough to prove that the existence of such variations makes spoken English discourse more difficult to understand. There are two reasons why this premise should be manifested on the British accents: 1) There are only two standardized literary varieties of the English language, one being British English, or more specifically one of its accents called the Received Pronunciation (RP), and the other being General American, the most widespread variety of American English. B) Most textbooks have preferred Received Pronunciation as the one variety that should be taught in schools (at least it is so in the Czech Republic) although this variety of the English language is spoken by only two or three per cent of the British population. By the way, the most widespread variation of American English is spoken by more than forty per cent of American English speakers. See Jenkins (2000), pages 14-15 and 17, where the author quotes several other
linguistics experts who express their doubts over the suitability of RP as the one variety that should be taught in schools and discuss Scottish English or General American as the alternatives that are more appropriate. Here are some examples of the pronunciation variations within the British English.

### 4.1.1. SELECTED PRONUNCIATION DIFFERENCES WITHIN BRITISH ENGLISH

In Language in the British Isles, Trudgill (1984) states that "in Cockney and various other urban accents the dental fricatives tend to be replaced (or realized identically with) other phonemes, namely /f/ for / $\Theta /$ and /v/ or /d/for / $\delta / . "$ (p. 57). The same author also claims that "Yorkshire speech is characterized by a special kind of assimilation involving a switch from voiced to voiceless obstruent before a following voiceless consonant." (p. 57). Later, on page 59, Trudgill reveals that "Bristol is well-known for its 'intrusive /l/' which occurs context-free in items which would otherwise end in [ə]." The linguistics expert does not forget about the h-dropping, calling it "perhaps the single most powerful sociolinguistic shibboleth in England." (p. 60). Another phenomenon mentioned by Trudgill is so called yod-dropping which is typical for several English regions including East Anglia. Altendorf (2003) describes yod-dropping as "the loss of palatal glide $/ \mathrm{j} /$ resulting in the variants [tV, dV, nV]" (p. 67). However, in East Anglia Trudgill observes yoddropping after other consonants, too. As far as the vowels are concerned, Trudgill says that "many vowels and diphthongs exhibit a very considerable range of geographical and social variations. Thus the word mouth, for example may be pronounced with vowel quantities as diverse as [ei], [ $£ \mho]$, [æ:], and [ay], as well as the more familiar [aひ] and [pひ] types." (p. 60). Still speaking about vowels, Trudgill notes that in the south-west "short vowels all tend to be lengthened" (p. 61). All the above mentioned examples are, as shown in the practical part of this thesis, capable of causing a lot of difficulties in understanding spoken English discourse, yet they are merely a fractional part of all the existing departures from the rules of Received Pronunciation.

## 5. PRACTICAL PART

### 5.1 THE ASPECTS OF CONNECTED SPEECH

### 5.1.1. ASSIMILATION OF PLACE OF ARTICULATION

The theoretical part of the thesis explained the rules of assimilation of place of articulation. In his book, Roach (1991) says that "assimilation of place is only noticeable in this regressive assimilation of alveolar consonants; it is not something that foreign learners need to learn to do" ( p . 125). That is true. The majority of the non-native speakers never reach the level of the English language speaking skills where they can speak fast enough to produce speech that would contain the elements of assimilation of place of articulation or the other aspects of connected speech, (see Jenkins, 2000, pages 72 and 148). It is also impossible to imagine that during a conversation with a native speaker of the English language, they would have enough time to apply their theoretical knowledge of these rules in order to understand what the native speaker is saying. Nevertheless, it does not mean that assimilation of place of articulation does not cause difficulties in understanding spoken English discourse. Let us use a short conversation as a simple example: A: 'What are you eating?' B: 'Meat pie.' In fast casual speech where assimilation of place of articulation is used, [mi:p pai] is what the listener gets to hear. But if you are staying in Britain, you may hear the very same thing even if the answer is a colloquial 'Me pie'. The fact that A does not learn the type of cake that B is eating is probably not a misunderstanding that can cause serious consequences but it certainly is a language misunderstanding caused by an instance of assimilation of place of articulation, one that would not happen in written discourse. As Roach says, it may not be necessary to learn the rules of assimilation of place of articulation by heart but it is essentially important for the English language learners that their teachers, their textbooks and their audio materials prepare them for this phenomenon and its impact on the pronunciation by displaying examples of fast, casual spoken English discourse in which the aspects of connected speech including the examples of assimilation of place of articulation are aplenty.

### 5.1.2. ASSIMILATION OF VOICING

It has been said in the theoretical part of this work that although assimilation of voicing is present in other languages, too, it is a phonological phenomenon that may cause difficulties in understanding spoken English discourse. As explained earlier, it is due to the fact that it works differently in different languages. If, for instance, a Czech word (most likely a borrowed word) ends in ' g ' as, for example, in 'gag', a Czech language native speaker is going to pronounce it with $/ \mathrm{k} /$ as the word's last phoneme - /gek/. It is due to the rules of assimilation of voicing of the Czech
language, which in words of this type change voiced $/ \mathrm{g} /$ into voiceless $/ \mathrm{k} /$. More importantly, a Czech language native speaker would find it unnatural, if the word was pronounced with /g/. Since all Czech language native speakers pronounce this word and all similar words with $/ \mathrm{k} /$, they EXPECT to hear /k/ in such words. Not only in Czech (borrowed) words of this type but in all words of this type, including the words of a foreign language. An example of such English word is 'bag'. When a native speaker of the English language pronounces 'bag' separately or at the end of a sentence, assimilation of voicing does not take place and $/ \mathrm{g} /$ does not change into $/ \mathrm{k} /$. It means that what an Englishman says is /bæg/ but what a Czech person, who is unaware of the existence of the differences between the rules of assimilation of voicing of English and the Czech language, perceives or thinks he/she hears is /bæk/ or rather /bék/. From a personal experience I may say that this fact does cause difficulties in understanding spoken English discourse. While working as a barman in Jesson's Well, a bar in Daventry (Northamptonshire, UK), I was once asked by a customer who was just about to pay for his drinks: "Do you do cash-back?" Not knowing what 'cash-back' means and being unaware of the different pronunciations of the ending consonants in 'back' and 'bag' I replied: "You want a bag /bék/?" Not only was I confused by the customer's demand but the customer himself was confused by my response which would have been comprehensible to him only if I had pronounced the word 'bag' correctly (with $/ \mathrm{g} / \mathrm{-} / \mathrm{bæg} /$ ) or if he had been used to the way that most Czech speakers of the English language pronounce the word 'bag' (/bék/). In other words, I would not necessarily have had to know the meaning of the word 'cash-back' before the customer used it to figure out what he had been asking for if I had been aware of the differences between the rules of assimilation of voicing of English and the Czech language and, therefore, aware of the differences in pronunciations of 'back' and 'bag'. It is the truth that incorrect pronunciation and/or wrong perception of words whose pronunciation is affected by assimilation of voicing do not always have to cause difficulties in understanding spoken English discourse because the context usually helps overcome the misunderstandings, but as just demonstrated above, the misunderstandings caused by assimilation of voicing and/or the different rules of this phenomenon in different languages cannot always be avoided.

### 5.1.3. VOICELESS GLOTTAL PLOSIVE, T GLOTTALING

Although Roach (1991) and Skandera with Burleigh (2005) denote the phenomenon little significance, T glottaling still is an example of a consonant being performed in a different way than it was originally supposed to. As mentioned in the theoretical part of this thesis, consonants are essentially important for understanding spoken discourse. In fact, linguistics experts, including the well-known theater and film dialect coach Paul Meier, claim that as far as the intelligibility of
speech is concerned, consonants are far more important than vowels. Meier demonstrates this opinion on a simple test which can be found in his blog posted at www.englishcafe.com/blog/english-vowels-and-consonants-22460 in June 2009. In this audio experiment he reads the same sentence twice. On the first reading, Meier changes all the vowels into the schwa sound but as he reads slowly enough and articulates all the consonants clearly, the sentence remains easily intelligible. On the second read, Meier replaces all the sentence's consonants with $/ \mathrm{k} /$ and despite speaking slowly and pronouncing clearly, the listeners do not have a chance to decipher the meaning of the original sentence or recognize the words that Meier is using. Of course, one may say that in 'normal' speech not every consonant is glottaled or changed in the way Meier did in his experiment. However, in many accents of British English T glottaling occurs frequently enough and in combination with the other aspects of connected speech, it does create difficulties in understanding spoken English discourse. It should not be forgotten that apart from T glottaling, colloquial language features casualness and fast tempo. Taking that into account, what is there left to pronounce or hear of the following example sentence: "Marty bought me a bottle of water." In the non-rhotic accents of British English the r's in 'Marty' and 'water' are left out. Due to T-glottaling, which, as described in the theoretical part, takes place in many accents of British English, the t's in 'Marty', 'bought', 'bottle' and 'water' are omitted and replaced with the $/ \mathrm{z}$ / sound, which, as mentioned earlier, does not even represent any letter in many languages including the Czech language. Also, within this one little sentence we get three schwa sounds (the indefinite article ' $a$ ', in 'of' and in 'water'). The schwa sound itself is difficult to recognize, especially in the speedy tempo and casual pronunciation of colloquial British English. In addition, it is very likely that in fast causal speech the $/ \mathrm{v} / \mathrm{in}$ 'of' will be assimilated by the $/ \mathrm{w} /$ in 'water'. So when all these features, all of which are so typical of many accents of British English, are combined, what the listener eventually hears is /ma:ュı bo: mi: ə $\operatorname{boz}(\mathrm{l}) ~ \partial(\mathrm{v})$ wȯzə/. How many consonants have been lost in that one short sentence? Consonants that Meier's experiment proves to be crucial for the intelligibility of spoken English discourse. From a personal experience, which I acquired during my one year stay in England, I can tell that I perceived glottal stop as a significant cause of my difficulties in understanding fast casual speech. Let me demonstrate it on the following situation that I once found myself in: I was approached by a man who asked me a three-word question: "/Gor ə laizə?/" (Got a lighter?). Although none of those words was unknown to me (as I later realized), I was forced to ask the speaker to repeat his question three more times before I eventually understood what his request had been. It was the two cases of T glottaling that changed the sentence so much that it became completely unintelligible to me.

### 5.1.4. COALESCENT ASSIMILATION

The rock music history and The Prince of Darkness Ozzy Osbourne unintentionally provide us with an example of how coalescent assimilation can cause misunderstandings of spoken English discourse. In one of Ozzy's trademark songs, Paranoid, one of the lines reads: "I tell you to enjoy life." From the point of view of coalescent assimilation there seems to be nothing ground-shaking about that. But that is only until one learns that in reaction to this line, the artist was accused of encouraging his teenage supporters to commit suicide as the harmless sentence was incorrectly understood to be "I tell you to end your life". As described in the theoretical part of this thesis, /d/ and $/ \mathrm{j} /$ become $/ \mathrm{d} 3$ / and, thus, 'enjoy' and 'end your' sound very similar in many accents of British English as well as in other non-rhotic varieties of the English language. Since the above-described event took place in an English-speaking country and it can be assumed that most people involved were the native speakers of the English language, it is a good time now to note that the aspects of connected speech do not make the language more difficult to understand to the non-native speakers only but to those who call English their mother tongue, too.

### 5.1.5. ELISION

It comes as no surprise that a phenomenon whose definition tells that a phoneme (or phonemes) and even whole syllables are sometimes elided may cause difficulties in understanding spoken English discourse. In the practical part of this thesis the goal is to bring examples in which ambiguity caused by an aspect of connected speech occurs that would not show in written discourse. The word 'police' may serve as an example in the case of elision. When pronounced in rapid, casual speech (/pli:s/), it is both easy and typical of a non-native speaker to think that the word 'please' was produced. But it does not require ambiguity for elision to make spoken English discourse confusing or difficult to understand. My nine-year teaching experience has shown that the English language learners, especially those at no higher than the pre-intermediate level, find it very difficult to understand even such basic words as 'today' when they are pronounced in fast, casual speech in which examples of elision can be found. /tudei/ is how many Czech elementary and preintermediate learners pronounce this word so when a native speaker uses it in fast, casual speech and in a certain combination (e.g. 'I want today to be the best day of the holiday'), it not unfrequently becomes completely unintelligible to the non-native speakers of the English language.

As far as the complex consonant clusters are concerned, ambiguity cannot be avoided either. Due to elision the pronunciation of 'acts' (/æks/) is the same as if 'axe' was pronounced.

Elision can also cause confusion in terms of what grammatical tense was used: 'I looked back' /ai lok bæk/ sounds the same as 'I look back' or even as 'I'll look back'.

As Roach (1991) writes: "As with assimilation, elision is typical of rapid, casual speech; the process of change in phoneme realisations produced by changing the speed and casualness of speech is sometimes called gradation. Producing elisions is something which foreign learners do not need to learn to do, but it is important for them to be aware that when native speakers of English talk to each other, quite a number of phonemes that the foreigner might expect to hear are not actually pronounced" (p. 127). One may deduce two things out of this: number one - elision (and the other aspects of connected speech) significantly changes spoken English discourse which then differs from RP spoken discourse, where RP is the pronunciation taught by most textbooks. And number two - elision is not an on/off thing but it differs from person to person according to his/her idiolect, the level of casualness and the speed with which they are speaking in different situations. Consequently, the one and the same word/sentence/speech may have many different variations. By the way, does this last quotation of Peter Roach not seem to be in a perfect contradiction with his own, earlier cited predication that the aspects of connected speech make spoken English discourse more easily intelligible?

### 5.1.6. LINKING AND INTRUSION, JUNCTURE

Linking is a phonological phenomenon which joins words together and erases the boundaries between them. It does so by adding the $/ \mathrm{w} / \mathrm{/} / \mathrm{j} /$ or $/ \mathrm{r} /$ phoneme between certain words although these phonemes are not present in the written form of the discourse. Kelly (2000) claims that due to junctures "listeners have no difficulty (most of the time) in telling where the join is" (p. 112). In other words, he claims that the listeners have no difficulty to understand what has been said. As far as linking $/ \mathrm{w} /$ and linking $/ \mathrm{j} /$ are concerned, it may be true. It is caused by the fact, that the sounds which are linked by $/ \mathrm{w} /$ and $/ \mathrm{j} /$ are 'close to each other in the mouth' when being produced and it can be said that these $/ \mathrm{w} /$ and $/ \mathrm{j} /$ linking phonemes are created in a natural way - the phonemes are not added artificially but they are created as the side product of the linking of the last phoneme of the first word and the first phoneme of the following word. As far as the third linking phoneme is concerned, Kelly (2000) admits that "linking/r/ could lead to confusion in the juncture" (p.112) and that "context clearly plays a role here." (p.112). He also describes junctures as "subtle differences in pronunciation" (Kelly, 2000, p. 112) However, the truth is that those differences are often so subtle that in many cases they cannot supply sufficient advice on where the juncture is, especially not to those non-native speakers of the English language who have not yet acquired enough experience in communicating with the native speakers of the English language and, therefore, have not yet gotten used to the linking phenomenon (nor to the other aspects of connected speech). Every textbook gives a number of well-known examples of intrusive /r/: 'law and order'
changes into 'lore and order' or 'law ran order'. 'Draw all the flowers' sounds like 'Drawer all the flowers. 'Idea' turns into 'idear' and 'Linda' becomes 'Linder'. Similarly, a number of minimal pairs are provided: he lies $v$. heal eyes, keeps ticking $v$. keep sticking. In combination with the other aspects of connected speech (e.g. assimilation) or other phonological phenomena (e.g. weak syllables), casual speech can produce a countless number of situations which can make a native listener mishear what has been said, let alone a non-native one. Let us take a look at a simple example: Due to linking (and several other factors, e.g. stressed and unstressed syllables), it is easy for a non-native listener to think that in 'My neck aches' the word 'cakes' was produced. Since the listener does not know what the word 'cakes' was preceded by, the situation may end up in a 'What cake?' follow-up question. This particular conversation actually did take place in 2006 during my stay in Great Britain, with me, of course, being the one who misunderstood the original sentence and asked the above-mentioned follow-up question. Kelly (2000) brings evidence of the occurrence of such cases as he states that "coincidence of sounds can lead to examples where listeners may hear an unintended word." (p. 113) To demonstrate the statement he lists several examples including the one from a Jimmy Hendrix song called Purple Haze, in which one of the lines reads ''Scuse me, while I kiss the sky,' which is misheard for ''Scuse me, while I kiss this guy.' The faster and the more casual the speech (and the less experienced the non-native listener), the bigger the chance that linking cause a misunderstanding in communication.

### 5.2. STRESS

### 5.2.1. STRESS, WEAK SYLLABLES

It was said in the earlier part of this thesis that the weak syllables (i.e. the unstressed syllables that contain schwa, /i:/, /I/, /u:/, /J/ or a syllabic consonant) are shorter and pronounced with little energy which makes them less perceptible than the primary and the secondary stresscarrying syllables. It was also proved that consonants play a key role in allowing the listeners to understand what has been said. Logically, this must mean that the position of the weak syllable's vowel within a word and the phonemes that surround that vowel play a crucial role in the weak syllable's intelligibility. In longer words of, for example, three syllables where the schwa sound can be found in the middle syllable and is surrounded by consonants (pronounced consonants) like in e.g. 'melody', the schwa is not very likely to cause a difficulty in recognizing the word (unless, of course, the schwa sound is elided completely). However, since schwa is "the most frequently occurring vowel in English" (Roach, 1991, p. 76), it can be found in other positions within a word, too. Taking into account what has been said about the importance of consonants for the intelligibility of speech, it can be said that the fewer consonants 'are giving support' to the weak
syllable's vowel, the more likely it is to cause difficulties in understanding spoken English discourse. This can be observed in words like 'arrive', 'affair' 'accept' or 'abandon' in which the schwa sound is the only phoneme of the first syllable. Although I cannot yet support the following statement with any figures or research, I can say that during my nine-year teaching career, I have repeatedly had to answer my students' questions of the 'What does 'bandon' mean' type while doing listening exercises in which words like 'abandon' were used. Just like in case of the initial position of the weak syllable, its final position, too, can cause difficulties in understanding spoken English discourse. As far as the final position of the weak syllable is concerned, it should be distinguished between the weak syllables that end with the schwa sound (or with a close front unrounded vowel or a close back rounded vowel) like in 'Sarah' and those in which the weak syllable is finished with a consonant like in e.g. 'even'. Paradoxically, the latter may seem to have the power to cause even more misunderstandings, at least in case than the following word starts with the same consonant. That is because, as Kelly (2000) says, "Consonants often seem to be attracted across word boundaries." (p. 112). Consequently, apart from having to deal with the schwa sound, the listener has to deal with linking and the quest for the juncture, too, which results in the fact that, for example, 'Even Ned' may be interpreted as 'Even Ed' or 'Eve and Ed' (/i:v ən ed/, see Weak Forms). Since the weak syllables are shorter and pronounced with little energy, it is also deducible that when they are overheard, it can lead to the similar phenomenon that Kelly described while speaking about linking, that is coincidence of sounds that makes listeners hear unintended words. Or is it not possible that in fast casual speech 'private teacher' can be misheard for 'prive a teacher'. 'Prive', of course, is not an existing word, but how many non-native, yet fluent speakers of the English language know all existing English words? After all, while speaking about hearing unintended words, Kelly (2000) mentions hearing English-sounding, yet non-existing words, too. (See p. 113).

### 5.2.2. WEAK FORMS

Since there exists only a limited number of weak forms, their potential to cause difficulties in understanding spoken English discourse is limited, too. It is due to the fact that the density of those roughly forty function words which can be pronounced in their weak forms is so high that it does not take a long time for the non-native speakers to get used to them. In addition, since many of the weak forms are articles, prepositions, conjunctions and auxiliary verbs, it is usually not impossible to work out the meaning of the given sentence even without understanding the words that were pronounced in their weak forms (of course, that in case that one could understand the rest of the sentence). Therefore, it can be said that the misunderstandings caused by the weak forms are
usually not the major ones. That does not mean, though, that none can be found: If 'and' is pronounced in its weak form in, for example, 'Eve and Pat did it', it is very easy to misinterpret it for 'Even Pat did it'. Apart from that, one weak form can arguably be pronounced an exception to proclaiming the misunderstandings caused by the weak forms minor, and that is the weak form of 'can', or more specifically its role in distinguishing between an affirmative and a negative sentence with 'can' in American English. If, for instance, an American says 'Jane can't do it for you', it is very likely that in fast casual speech the ' $t$ ' in 'can't' will not be pronounced (/kæn/) and thus a nonnative English language speaker might easily consider the sentence affirmative unless he/she is aware of the fact that if the sentence actually WAS affirmative ('Jane can do it for you'), the modal verb would be pronounced in its weak form (/kən/). Obviously, apart from the context there is intonation that in this case should provide sufficient help in determining whether the above mentioned sentence is affirmative or negative. But even intonation cannot cover all the situations and more importantly, at least as far as the Czech Republic is concerned, intonation training is given almost no time during the middle and high schools classes of the English language. For these reasons being capable of distinguishing between the weak and the strong forms of 'can' can help a non-native speaker avoid this type of misunderstandings in spoken English discourse.

### 5.3. RHOTIC AND NON-RHOTIC VARIETIES

While speaking about the rhotic varieties of the English language, most people are likely to think of American English. The strong American /r/ can be labeled arguably the most distinctive feature of the language, and undoubtedly, it is one of the first phenomena of the English language pronunciation that most students pick up while trying to achieve a native-sounding accent. On the other hand, the non-rhotic varieties of the English language feature so called r-dropping which means that in many words the speakers of these varieties do not pronounce this consonant at all (the rules of r-dropping to be found in the theoretical part of the thesis). It was already said several times earlier in this text that consonants are essentially important for the intelligibility of spoken English discourse, therefore it can be stated that omitting /r/ can cause difficulties in understanding speech. Jenkins (2000) even suggests that for the purposes of communication with the non-native speakers, the native speakers of the non-rhotic accents of the English language should master the production of /r/ (p.228). Of course, this opinion can be agreed with only if one puts the non-native speakers' varieties of the English language on the same level with those of the native speakers, but it certainly proves that even linguists, or at least some of them, consider r-dropping a phenomenon that does cause intelligibility problems. Let us now take a look at an example: in the chapter on coalescent assimilation, it was shown how 'enjoy life' can be understood as 'end your life'. This is only possible in the non-rhotic varieties of the English language because in the rhotic varieties, the /r/ in
'your' would be pronounced, and it would not allow for the ambiguity to take place. Unlike that, ambiguity in the making is observable in the non-rhotic accents of the English language in which dropping the /r/ phoneme makes 'court' sound the same as 'caught', 'sore' as 'saw' or 'pore' as 'paw'. But r-dropping does not need to lead to ambiguity to make spoken English discourse more difficult to understand. What is there left of 'armour' and other similar words when pronounced in a non-rhotic accent? Both r's are omitted and the final syllable ends in schwa. What one eventually hears is /a:mə/. In the rhotic accents, such word is easily intelligible because the r's are pronounced and give the word two more consonants that make it easier to recognize. However, when articulated in fast causal speech of a non-rhotic accent and affected by the aspects of connected speech (e.g. linking), a listener may perceive such word, or what has left of its written form, as merely an unstressed part of the previous or the following word. Although it may be hard to believe, the following incident really happened to me when I was staying in Weedon (Northamptonshire, UK): While talking to my landlord, I did not understand the last part of the following elementary sentence: 'He has a new car,' and I came back asking: 'He has what?' In the Czech language, it is not natural to drop the /r/ phoneme, therefore when it is not pronounced, the Czechs do not 'look for' it. As the 'end your life' example proves, the effects of r-dropping on the intelligibility of spoken English discourse can hardly ever be fully eliminated, and the phenomenon can confuse even the native speakers of the English language, or at least contribute to the confusion. It is therefore important to raise awareness of this phenomenon among the English language learners by making them listen to the non-rhotic varieties of the English language and by addressing the examples of it whenever they are present in the discourse. Unfortunately, a majority of the Czech teachers of the English language, or at least those that I have met, first, as a grammar school student and, later, as a teacher at three elementary and four high schools in Klatovy and Plzeň, pronounce American /r/ although otherwise they are using RP pronunciation and vocabulary. Consequently, their students have only a limited chance to get used to the r-dropping phenomenon.

### 5.4. SELECTED PRONUNCIATION DIFFERENCES WITHIN BRITISH ENGLISH

The non-native speakers of the English language sometimes say that the language that they get to hear when staying in the United Kingdom is a completely different language than the one they get to hear on the BBC. While on a vacation in Scotland, a friend of mine approached a Scot to ask about the way. The kilted man answered in his colloquial Scottish English (actually in one of its existing variants) only to make my friend reply: 'Sorry, I didn’t know you don't speak English.' Regional dialects (especially when combined with the aspects of connected speech) undoubtedly cause a lot of difficulties in understanding spoken English discourse and the following examples, based on the theoretical data given earlier in this work, convincingly demonstrate the statement. In

Cockney and in several other dialects, / $\Theta$ / can be replaced by /f/ so that 'thin' sounds like 'fin' and 'I thought' sounds like 'I fought'. On top of that, in the latter example and in fast casual speech, the /t/ in 'thought' is very likely to be glottaled and the final product (/fo: $2 /$ ) is literally a brand new word for any non-native speaker of the English language who was trained in no other accent but RP. In Yorkshire, certain voiceless consonants that precede other voiceless consonants become voiced and the phenomenon makes 'white sheet' sound the same as 'wide sheet'. Another example described in the theoretical part of this thesis speaks about the introduction of intrusive $/ 1 /$ in words which otherwise end in the schwa sound. Thus, in Bristol where this phenomenon is observable, you may think the word 'normal' was produced although what the speaker of that accent actually pronounced was 'Norma'. H-dropping is a well-known phonetic change that can be found in several dialects across Great Britain, and it sees 'hedge' become a homophone of 'edge'. It is a proved fact that Received Pronunciation is usually spoken by the elder native speakers of the English language and by the well-educated members of the higher social strata while a big number of the other accents and dialects of British English are often linked to the opposite side of the spectrum of the British population. As far as the accents that feature h-dropping are concerned, this predication stands. As Trudgill (1984) points out, "Nearly everywhere working-class accents are characterized by the absence (variable or categorical) of the [h] which RP speakers use." (p. 60). Arguably in an attempt to disguise the low level of education, the speakers of some regional accents introduce $/ \mathrm{h} /$ even where there should not be any, so that words like 'heaster' (instead of Easter) create even more difficulties in understanding spoken English discourse. In order to cover all the examples presented in the theoretical part of the thesis, the yod-dropping of the East Anglia accent must not be forgotten about. The broadened use of this phenomenon changes the pronunciation of 'beauty' which then sounds the same as 'booty'. In south-west where the short vowels all tend to be lengthened, 'did' is pronounced in the way that makes it sound the same as 'deed' and in different regions of the country 'mouth' can sound as if it was spelled in one of the following ways: 'marth', 'mayth' or 'moath'. The above-given list is far from complete as it only mentions a handful of accents that the English language of the United Kingdom has to offer. Apart from them there are all the other English-speaking countries with their own national standards and a countless number of regional dialects that vary from one another. However, even the few above listed examples suffice to bring enough evidence of the fact that regional dialects do cause difficulties in understanding spoken English discourse because the one and the same word is pronounced in many different ways and differently than the non-native RP speakers are taught and that the English language native speakers from different corners of the world find natural.

## 6. CONCLUSION

The goal of this thesis was to take a look at selected phonological phenomena that are observable in the speech of the native speakers of the English language and show that these cause difficulties in understanding spoken English discourse to both the non-native speakers as well as to other native speakers of the English language. Beyond all doubt, the above given practical examples supported by the theoretical background have done so. Admittedly, it must be pointed out that the casualness of pronunciation and the fast tempo of colloquial speech are a common factor which multiplies the effects that these phenomena have on the intelligibility. On the other hand, the highest speeds of spoken English discourse would probably not be possible to achieve if the aspects of connected speech did not ease the pronunciation.

It has been unveiled that the above listed phonological phenomena alter the pronunciation of English words. They make them sound significantly different from what one would expect, yet paradoxically, in some cases the phonetically altered words start to sound the same or very similar as other, different words. This leads either to a complete loss of the intelligibility of the spoken English discourse or its part, or, in the latter case, to ambiguity. Of course, this ambiguity would never occur in the written discourse and that itself is a powerful piece of evidence of the fact that these phonological phenomena are to be blamed for the existence of the intelligibility problems in spoken English discourse. It must not stay unmentioned that although in this work the effects of each phenomenon were discussed separately, in everyday speech there are usually more of them 'working together' and so their effects on the intelligibility of spoken English discourse are even greater than the given examples may suggest.

While discussing intelligibility, some may ask 'unintelligible to whom?' They may cite Jenkins (2000) and her argument that "People inevitably judge the intelligibility of speech according to their own level of understanding" (p. 213) and thus suggest that the intelligibility problems that the non-native speakers report to suffer from are caused by the low level of their English language knowledge rather than by assimilation, elision, linking etc. However, if these problems are reported even by the fluent non-native speakers of the English language who do not have any problems to read fast or to be understood by the native speakers, their problems to understand must be caused by something else, that is, for example, by the above mentioned phonological phenomena. In addition, the given practical examples have proved that under certain circumstances not only the non-native speakers of the English language but the native speakers, too, have to deal with the intelligibility problems when involved in spoken communication with other native speakers and in their case no-one can question their level of English language knowledge. Of course, there is no arguing over the fact that the longer experience a non-native speaker has with the
phoneme-changing aspects of connected speech, the more he/she gets used to them and consequently, their intelligibility problems subside, but since the native speakers suffer from the intelligibility problems too, it cannot be doubted that no one can avoid them completely.

Apart from the phonological phenomena, including those that are not described in this work, there are, of course, other factors that affect the intelligibility of speech. For example, not knowing the cultural background of the English-speaking country in which one is staying is the one that is mentioned by several linguists (see Jenkins, 2000). That, however, cannot change anything about the fact that the above mentioned phonological phenomena do cause intelligibility problems in spoken English discourse.

## 7. REFERENCES

Aarts, B., McMahon, A. (2006). The handbook of English linguistics. Blackwell Publishing Ltd.

Airbubba, (2004, Nov 2). Disasters due to ATC Misunderstandings [Web log post]. Retrieved from http://www.pprune.org/questions/150526-disasters-due-atc misunderstandings.html
Altendorf, U. (2003). Estuary English: Levelling at the Interface of RP and South-Eastern British English. Gunter Narr Verlag Tübingen.

Cushing, S. (1994). Fatal Words: Communication Clashes and Aircraft Crashes. Chicago \& London: The University of Chicago Press.
enicalyth, (2004, Nov 6). Disasters due to ATC Misunderstandings [Web log post]. Retrieved from http://www.pprune.org/questions/150526-disasters-due-atc misunderstandings.html

Jenkins, J. (2000). The Phonology of English as an International Language. Oxford University Press 2000

Kelly, G. (2000). How to Teach Pronunciation. Pearson Education Limited.
Meier, P (2009, Jun 26). English Vowels and Consonants [Web log post]. Retrieved from http://www.englishcafe.com/blog/english-vowels-and-consonants-22460

Odlin, T. (1989). Language transfer: cross-linguistic influence in language learning. Cambridge University Press 1989.
ric d, (2008). Why is English so difficult to understand? [Web log post]. Retrieved from http://answers.yahoo.com/question/index?qid=20080819093647AANq3vf
Roach, P. (1991). English Phonetics and Phonology. Cambridge University Press.
Sam, (2005, Jan 3). Yeah but, no but... [Web log post]. Retrieved from
http://www.urbandictionary.com/define.php?term=vicky+pollard
Shaw, George Bernard. Retrieved from http://www.quotationspage.com/subjects/England/
Skandera, P., Burleigh, P. (2005). A manual of English Phonetics and Phonology. Narr Francke Attempto Verlag GmbH + Co. KG
Trutgill, P. (1984). Language in the British Isles. Cambridge University Press.
Wilde, O. (1998). Oscar Wilde's Wit and Wisdom: A Book of Quotations. Dover Publications, Inc.

Wolf, H., Peter, L., \& Polzenhagen, F. (2008). Focus on English: linguistic structure, language variation and discursive use. Leipziger Universitätsverlag.

